

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings include changes to Figs. 9 - 12, wherein the only changes made to these figures have been labeling Figs. 9 - 12 as "PRIOR ART".

Attachment: Replacement sheets (2 pages)

REMARKS

Non-elected claims 5, 10 - 15 and 19 - 23 have been canceled, without prejudice to filing one or more divisional application directed to the inventions represented by these claims.

Corrected drawing sheets for Figs. 9 - 12 are submitted herewith, wherein the only changes made to these figures have been labeling the figures as "PRIOR ART", as suggested to overcome the objection. Withdrawal of the objection to the drawings is respectfully requested.

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Smithson et al. 6,260,782.

Claim 1 has been amended to define the cylindrical drum cover plate as being **elastically deformable** as supported at paragraph [0021] fifth line, and elsewhere throughout the specification. Claim 1 has been further amended to define the drum cover plate as having a discontinuous portion **consisting of a slit** to absorb a winding pressure applied to the drum cover plate. In this structure, while the metallic wire is wound around the reel, the drum cover plate is elastically deformed flexibly by a large tightening force applied to the winding drum. In addition, since the discontinuous portion, consisting of a slit formed in the drum cover plate, functions to absorb elastic deformation of the drum cover plate, most of the large tightening force applied to the winding drum is absorbed by the drum cover plate.

In the Smithson et al. '782 patent, Fig. 2 shows a cross-section of the spool of Fig. 1 under normal operating conditions. Fig. 3 shows the spool under loaded conditions, *e.g.*, crash situation. The outer wall 4 has a longitudinal extending gap 5. As clearly shown in Fig. 3, the gap 5 is closed and will not open further. Accordingly, the outer wall 4 of the Smithson et al. '782 patent cannot be elastically deformed as defined in claim 1 of this application. Accordingly, it is submitted that claim 1 patentably distinguishes over the Smithson et al. '782 patent.

Further the reel of the claimed invention comprises the winding drum having a double-wall structure comprised of the winding face of a reel body and a cylindrical drum cover plate, and the drum cover plate is provided with a gap between the drum cover plate and the winding face of the reel body. In this structure, while the metallic wire is wound

around the reel, the drum cover plate is elastically deformed flexibly. Since the drum cover plate not only expands but also reduces to absorb elastic deformation of the drum cover plate, most of the tightening force applied to the winding drum is absorbed by the drum cover plate. Therefore, in accordance with the claimed invention, it is possible to inhibit the center portion of the winding drum from being deformed to reduce the diameter by the large tightening force applied to the winding drum when the metallic wire is wound around the reel. As a result, the durability of the reel is improved. Gap 5 of the Smithson et al. '782 patent that is provided in the outer circumferential wall or layer is closed, defining a maximum force limitation and preventing further collapse of the spool diameter and further spool pay-out. Therefore, gap 5 of the Smithson et al. '782 patent functions entirely differently from the discontinuous slit in the reel of the claimed invention.

Claims 1, 2 and 16 - 18 stand further rejected under 35 U.S.C. §102(b) as being anticipated by Harper 1,527,478 ('478). The Harper '478 patent is provided with slit 21. An inner drum 2 is provided with radially extending side walls 4 and 5, respectively, at each end thereof. The side walls 4 and 5 are formed with relatively broad peripheral edges 6 and 7, respectively. The wall 4 of the inner drum 2 has a radially extending flange 11, and a lock ring 12 is secured to the wall 5 of the inner drum 2. The outer drum 8 is sitting upon the edges 6 and 7 and, therefore, restrained from free movement by the flange 11 and the lock ring 12. Accordingly, the outer drum 8 of the Harper '478 patent cannot be elastically deformed as claimed herein. It is submitted, therefore, that the rejection of claims 1, 2 and 16 - 18 under 35 U.S.C. §102(b) should be withdrawn.

Claims 6 - 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Harper '478 patent. For the reasons set forth above with respect to claims 1, 2 and 16 - 18, it is submitted that the Harper patent does not meet the features of claims 6 - 9 which ultimately depend from claim 1.

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It is submitted that all claims are now of proper form and scope for allowance.
Early and favorable consideration is respectfully requested..

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Respectfully submitted,

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Attachment (2 sheets)